



SEQUENCE LISTING

<110> Zdanovsky, Alexey
Zdanovskaia, Marina
Ma, Dongping
Wood, Keith V.
Almond, Brian
Wood, Monika G.
Promega Corporation

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Proteins

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<140> US 10/664,341

<141> 2003-09-16

<150> US 60/411,070

<151> 2002-09-16

<150> US 60/412,268

<151> 2002-09-20

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<210> 67

<400> 67

000

<210> 68

<211> 684

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized GFP sequence

<400> 68

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gacctgaccg	tgatcgaggg	cgccccctg	cccttcgctt	atgacattct	caccaccgtg	180
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cagaccttcc	ccgagggcta	ctcgtgggag	cgaagcatga	catacgagga	ccagggaatc	300
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aaagccaaga	aggtggtgca	gcttcccagc	taccacttcg	tggaccaccg	catcgagatc	600
gtgagccacg	acaaggacta	caacaaagtc	aagctgtacg	agcacgccga	agcccacagc	660
ggactacccc	gccaggccgg	ctaa				684

<210> 69

<211> 1776

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized firefly luciferase

<400> 69

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tctcagccta	ccgtggtggt	cgtgtctaag	aagggcctgc	agaagatcct	gaacgtgcag	420
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gagcaggccg	ccggcaccct	gccccatgagc	tgcgcccagg	agagcggcat	ggatagacac	1740
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<210> 70
 <211> 1829
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A synthetic optimized firefly luciferase

<400> 70

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gccttcaccg	atgcccacat	tgagggtggac	atcacctatg	ccgagtactt	cgagatgtct	180
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ttccagagca	tgtacacatt	cgtgacatct	catctgcctc	ctggcttcaa	cgagtacgac	540
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gcttgcgcca	gcgccaggat	caacgtcta				1829

<210> 71
 <211> 1776
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A synthetic optimized firefly luciferase

<400> 71

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gagcaggccg	ccggcaccct	gccccatgag	tgcgcccagg	agagcggcat	ggatagacac	1740
cctgctgctt	gcgccagcgc	caggatcaac	gtctaa			1776

<210> 72

<211> 1830

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized firefly luciferase

<400> 72

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<210> 73
 <211> 1059
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A synthetic optimized Renilla luciferase

<400> 73
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<210> 74
 <211> 1113
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A synthetic optimized Renilla luciferase

<400> 74
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 aagcacgccg agaacgccgt gatTTTTtctg catggtaacg ctgcctccag ctacctgtgg 180
 aggcacgtcg tgcctcacat cgagcccgtg gctagatgca tcatccctga tctgatcgga 240
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 ctcaccgctt ggttcgagct gctgaacctt ccaaagaaaa tcatctttgt gggccacgac 360
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<210> 75
 <211> 1140
 <212> DNA
 <213> Artificial Sequence

<220>

<223> A synthetic optimized Renilla luciferase

<400> 75

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caggccgccg	gcaccctgcc	catgagctgc	gccaggaga	gcggcatgga	tagacaccct	1080
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<210> 76

<211> 1857

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized firefly luciferase

<400> 76

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cacgcccgcg	accctatttt	cggcaaccag	atcatccccc	acaccgctat	tctgagcgtg	720
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gccgccggca	ccctgccc	cat	gagctgcgcc	caggagagcg	gcatggatag	acaccctgct	1800
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<210> 77
 <211> 1752
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A synthetic optimized click beetle sequence

<400> 77

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<210> 78
 <211> 1833
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A synthetic optimized click beetle sequence

<400> 78

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gaatctttgc	ctaatttcat	ctctcgctat	tcagacggca	acatcgcaaa	ctttaaacca	540
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<210> 79

<211> 1752

<212> DNA

<213> Artificial Sequence

<220>

<223> A synthetic optimized click beetle sequence

<400> 79

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<210> 80
 <211> 1833
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> A synthetic optimized click beetle sequence

<400> 80
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 gtctagggcg cggactttat ttattttatt ctt 1833

<210> 81
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> A synthetic mutant ODC peptide

<220>
 <221> SITE
 <222> (1)...(39)
 <223> Xaa = any amino acid wherein one or more of the
 Xaa residues are not the naturally occurring
 residue

<400> 81
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 Met Ser Cys Ala Gln Glu Ser Gly Xaa Xaa Arg His Pro Ala Cys
 20 25 30
 Ala Ser Ala Arg Ile Asn Val

<210> 82

<400> 82
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<210> 83

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<210> 86

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<210> 87

<400> 87
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<210> 88

<400> 88
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<210> 89

<211> 16

<212> PRT

<213> Artificial Sequence

<220>

<223> A synthetic peptide

<400> 89

Ala Cys Lys Asn Trp Phe Ser Ser Leu Ser His Phe Val Ile His Leu
1 5 10 15

<210> 90

<211> 35

<212> PRT

<213> Artificial Sequence

<220>

<223> A synthetic peptide

<400> 90

Ser Leu Ile Ser Leu Pro Leu Pro Thr Arg Val Lys Phe Ser Ser Leu
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Leu Leu Ile Arg Ile Met Lys Ile Ile Thr Met Thr Phe Pro Lys Lys
20 25 30

Leu Arg Ser
35

<210> 91
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide

<400> 91
Phe Tyr Tyr Pro Ile Trp Phe Ala Arg Val Leu Leu Val His Tyr Gln
1 5 10 15

<210> 92
<211> 46
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide

<400> 92
Ser Asn Pro Phe Ser Ser Leu Phe Gly Ala Ser Leu Leu Ile Asp Ser
1 5 10 15
Val Ser Leu Lys Ser Asn Trp Asp Thr Ser Ser Ser Ser Cys Leu Ile
20 25 30
Ser Phe Phe Ser Ser Val Met Phe Ser Ser Thr Thr Arg Ser
35 40 45

<210> 93
<211> 39
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide

<400> 93
Cys Arg Gln Arg Phe Ser Cys His Leu Thr Ala Ser Tyr Pro Gln Ser
1 5 10 15
Thr Val Thr Pro Phe Leu Ala Phe Leu Arg Arg Asp Phe Phe Leu
20 25 30
Arg His Asn Ser Ser Ala Asp
35

<210> 94
<211> 46
<212> PRT
<213> Artificial Sequence

<220>
<223> A synthetic peptide

<400> 94
Gly Ala Pro His Val Val Leu Phe Asp Phe Glu Leu Arg Ile Thr Asn
1 5 10 15
Pro Leu Ser His Ile Gln Ser Val Ser Leu Gln Ile Thr Leu Ile Phe
20 25 30
Cys Ser Leu Pro Ser Leu Ile Leu Ser Lys Phe Leu Gln Val
35 40 45

<210> 95
 <211> 39
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> A synthetic peptide

<400> 95
 Asn Thr Pro Leu Phe Ser Lys Ser Phe Ser Thr Thr Cys Gly Val Ala
 1 5 10 15
 Lys Lys Thr Leu Leu Leu Ala Gln Ile Ser Ser Leu Phe Phe Leu Leu
 20 25 30
 Leu Ser Ser Asn Ile Ala Val
 35

<210> 96
 <211> 45
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> A synthetic peptide

<400> 96
 Pro Thr Val Lys Asn Ser Pro Lys Ile Phe Cys Leu Ser Ser Ser Pro
 1 5 10 15
 Tyr Leu Ala Phe Asn Leu Glu Tyr Leu Ser Leu Arg Ile Phe Ser Thr
 20 25 30
 Leu Ser Lys Cys Ser Asn Thr Leu Leu Thr Ser Leu Ser
 35 40 45

<210> 97
 <211> 30
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> A synthetic peptide

<400> 97
 Ser Asn Gln Leu Lys Arg Leu Trp Leu Trp Leu Leu Glu Val Arg Ser
 1 5 10 15
 Phe Asp Arg Thr Leu Arg Arg Pro Trp Ile His Leu Pro Ser
 20 25 30

<210> 98
 <211> 50
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> A synthetic peptide

<400> 98
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